2019-04-30

Actual Obligation Rates Versus Comptroller Projected Obligation Rates

Daniels, Seamus P.; Harrison, Todd

Monterey, California. Naval Postgraduate School

SYM-AM-19-078

PROCEEDINGS
OF THE
SIXTEENTH ANNUAL ACQUISITION RESEARCH SYMPOSIUM

THURSDAY SESSIONS
VOLUME II

Acquisition Research:
Creating Synergy for Informed Change

May 8–9, 2019

Published: April 30, 2019

Prepared for the Naval Postgraduate School, Monterey, CA 93943.

ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL

Actual Obligation Versus Comptroller Projected Obligation Rates

Seamus P. Daniels—is a research associate and program manager for Defense Budget Analysis in the International Security Program at the Center for Strategic and International Studies (CSIS), where he contributes to the Center's research on issues related to defense funding and military readiness. He has authored publications on trends in the overall defense budget, the legislative process surrounding defense appropriations, Navy readiness funding, and NATO burden sharing. He holds a BA with honors from Princeton University's Woodrow Wilson School of Public and International Affairs with minors in Near Eastern studies and Arabic language and culture. [sdaniels@csis.org]

Todd Harrison—is the director of Defense Budget Analysis and the director of the Aerospace Security Project at CSIS. As a senior fellow in the International Security Program, he leads the Center's efforts to provide in-depth, nonpartisan research and analysis of space security, air power, and defense funding issues. He has authored publications on trends in the overall defense budget, military space systems, defense acquisitions, military compensation, military readiness, nuclear forces, and the cost of overseas military operations. He graduated from the Massachusetts Institute of Technology with both a BS and an MS in aeronautics and astronautics. [tharrison@csis.org]

Abstract

This paper seeks to enhance understanding of the formulation and accuracy of Department of Defense (DoD) Comptroller projected obligation rates in the defense acquisition sector. These projections are published annually for each appropriation account in the Financial Summary Tables released by the office of the DoD Comptroller. To understand the implications of these forecasts on the contracting acquisition area, this paper compares the Comptroller projected obligation rates for procurement accounts with actual obligation rates as well as budget execution benchmarks also compiled by the Comptroller's office. It assesses the reliability of the projections and their consistency with other DoD targets, identifies trends in the accuracy of obligations rates across different accounts, and attempts to isolate factors that may influence the formulation and accuracy of the projections.

Introduction

Obligation rates are considered one of the "key financial metrics" for the Department of Defense (DoD) in monitoring how programs allocate their funding and whether they remain on schedule (*Unobligated Balances*, 2006). While budget authority and total obligational authority track how much money is appropriated by Congress each year, obligations track how funding is committed by signing contracts, employing personnel, or otherwise making commitments to spend money (Schwartz et al., 2018). When determining the amount of funding that may be made available for an appropriation account in an upcoming fiscal year, DoD offices and the authorization and appropriations committees in Congress take previous years' actual obligation rates into consideration (Defense Security Cooperation Agency [DSCA], 2012). Programs that have not been able to adequately obligate prior year funding are less likely to receive the funding they are requesting for future years and, in more extreme cases, may have prior year unobligated funding rescinded by Congress.

The Office of the Under Secretary of Defense (Comptroller; OUSDC) publishes a baseline standard for cumulative obligation and expenditure rates by title of funding (procurement, RDT&E, O&M, etc.). This table of benchmarks, derived from 30 years of execution history, is intended to serve as a rule-of-thumb for the military services when

planning their program expenditures (Conley et al., 2014, pp. vi–vii). For procurement accounts, the benchmarks state that a cumulative 80% of the funding should be obligated by the end of the first year, 90% by the end of the second year, and 100% by the end of the third year (when the funding would otherwise expire; OUSDC, 2017). Expenditure rates are higher for RDT&E accounts given their two-year period of availability. It is expected that 90% of RDT&E funding should be obligated by the end of the first year and 100% by the end of the second year (OUSDC, 2017). Congressional staffs use this table as a baseline reference for judging whether particular funding lines and programs are obligating money on track or are falling behind.

The Comptroller's office also publishes Financial Summary Tables annually with the president's budget request that include a more granular projection of obligation rates by individual appropriation account. These projected rates, presented as a percentage of "total operating authority," represent the percent of a particular budget year of funding that the DoD expects to obligate over the course of the fiscal years that follow. Importantly, the Comptroller projected obligation rates are not cumulative, whereas the Comptroller benchmarks are cumulative obligation rates. For example, in the Army's Aircraft Procurement FY 2017 appropriations, DoD projected that 64.44% will be obligated in FY 2017, 25.00% in FY 2018, and 10.56% in FY 2019 (OUSDC, 2016, p. 004). Since this is a procurement account, the money is only available for three years and any leftover funding after that time would expire. In comparison, Research, Development, Test, and Evaluation (RDT&E) funding must be fully obligated within two years, while Operation and Maintenance (O&M) and Military Personnel (MILPERS) accounts must be obligated within one year (Schwartz, 2017).

Given the obligation rate benchmarks set by the Department, one would expect most if not all of the projections for the first year of obligations to meet or exceed the 80% threshold. However, the projected obligation rates fail to meet the execution benchmarks for many accounts. This lack of alignment poses questions over the usefulness of the projections as well as their accuracy in anticipating the rate of actual obligations. Similarly, the lack of change in the projections from year to year (the Army Aircraft Procurement account has had identical projections from FY 2013 through FY 2019), even as the funding and status of programs within the accounts changed considerably, calls into question the DoD's model for deriving projected obligation rates.

Obligation rates can be important for industry and investors as a measure of government contracting for current and future fiscal years. Private sector partners rely on projections for their own strategic planning, forecasting the overall potential for sales and revenue for the defense industry based in part on the expected obligation rates. Consequently, the obligation and outlay rates can impact the stock valuations of companies via their revenue forecasts. These projections are also important to defense companies themselves, particularly smaller ones, because the timing of programs can mean the difference between smooth cash flow and challenges to solvency. Given the significance these forecasts play in the acquisition sector, inaccurate projections could contribute to poor decision-making in the private sector that could lead to inefficiencies in the market and sub-optimum management decisions within companies.

In an effort to assess the reliability and accuracy of the Comptroller projected obligation rates, this paper provides an analysis of the projections for procurement accounts. It includes a survey of the projected obligation rates for a variety of procurement accounts from FY 2012 to FY 2019 and compares those projections against both the obligation rate benchmarks and actual obligation rates (from FY 2012 to FY 2015). The paper analyzes that

data by military department and certain types of account to identify trends and draw conclusions.

Literature Review

Previous studies have assessed the execution of DoD programs against the Department's obligation rate goals. A 2013 Defense Acquisition University (DAU) report examined potential causal factors preventing acquisition programs from meeting the execution benchmarks. The study surveyed 229 DoD personnel who ranked the impact of 64 factors on the performance of acquisition programs. According to the results, the late release of full obligation/budget authority due to continuing resolution authority, contract negotiations' delays, and contract award delays had the highest adverse impact on the achievement of execution goals (Tremaine & Kinnear-Seligman, 2013).

A 2014 study from the Institute for Defense Analyses (IDA) similarly assessed the underperformance of acquisition programs against the Comptroller execution benchmarks and investigated factors related to program execution. The report found that the rates for procurement obligations and RDT&E disbursements have been decreasing since 2006 and 2009, respectively. While the research team found that the benchmarks—though "potentially arbitrary to some extent"—are "a reasonable means of identifying funds for possible reallocation to higher priority needs," it concluded that "management attention unduly focuses on meeting benchmarks" and offered recommendations to improve program execution (Conley et al., 2014, pp. vi–vii).

Both of the aforementioned studies focused on the execution of acquisition programs against the benchmarks for obligation and expenditure rates. This paper builds on the existing research by comparing the actual obligation rates against the Comptroller projected obligation rates found in the Financial Summary Tables and the Comptroller benchmarks. Given the focus on the Comptroller projected obligation rates, this study is also conducted at the broader appropriation account level rather than the budget line level of detail used in the IDA analysis.

Methodology

Collecting Comptroller Projected Obligation Rates

The analysis in this report was conducted in three phases. The first phase entailed the collection of the Comptroller projected obligation rates from Section F of the Financial Summary Tables. Projections were captured for procurement appropriation accounts from FY 2012 to FY 2019. Data collection posed a challenge given the Financial Summary Tables' lack of a machine-readable format, forcing the research team to manually input the projections.

The research team then measured how often the projected obligation rates change from fiscal year to fiscal year before comparing them to the cumulative program execution benchmarks. The projections for procurement accounts were assessed to determine how often they met the 80% threshold for the first year of obligations and 90% for the second year. Accounts' alignment with the benchmarks were measured as a percentage of the total number of budget years in which the projected obligation rates met or exceeded the benchmarks. For the purposes of this analysis, the term "budget year" is used to refer to the year in which funding is originally appropriated for an account. Funding can then be obligated in that fiscal year and in the fiscal years that follow.

The research team studied 18 procurement accounts. Several procurement accounts were excluded from the analysis as exceptions because they do not follow the standard

obligation practices for procurement accounts. They include Shipbuilding & Conversion, Navy; Coastal Defense Augmentation; Defense Production Act Purchases; Chemical Agents & Munitions Destruction; and the MRAP Vehicle Fund.

Two procurement accounts contain less data than the other accounts. The Space Procurement, Air Force account was only created in FY 2016 so there are only four budget years' worth of projections and no budget years' worth of actual obligation rates. The National Guard and Reserve Equipment account also lacked projections for FY 2019.

Calculating Actual Obligation Rates

The second phase of this analysis entailed the calculation of the actual obligation rates of the selected procurement accounts. To calculate the actual obligation rate of funds, the total obligations in a given fiscal year from a particular budget year's funding is divided by the total available for obligation for that budget year including any adjustments that may occur in subsequent fiscal years. This data can be found in Section G of the Financial Summary Tables.

For example, as shown in Table 1, the Aircraft Procurement, Army account had $5,902,609,000 available for obligation for budget year 2015. Over the next two fiscal years, Congress and the DoD made adjustments to the 2015 budget year funding in this account, totaling a net addition in funding of $455,317,000 in FY 2016 and $105,597,000 in FY 2017, as shown in Table 1. Thus, the total budget year 2015 funding for this account ended up being $6,453,523,000. This is the total available for obligation used in the denominator when calculating the actual obligation rate for each year. As shown in Table 2, the total obligations in each fiscal year of the specific budget year's funding is then divided by the total available to calculate the actual rate of obligation for each fiscal year. Actual obligation rates were only calculated for budget years from 2012 to 2015 due to the lack of complete data (i.e., final appropriated and executed amounts) for budget years 2016 through 2019.

Table 1. Aircraft Procurement, Army Budget Year 2015 Funding

Budget Year 2015	FY 2015	FY 2016	FY 2017	Final
Budget Authority	$5,799,286,000	-$25,000,000	-$15,000,000	
Balances Transferred		-$13,000,000	-$22,257,000	
Recoveries of Prior Year Obligations		$464,861,000	$72,995,000	
Reimbursable Orders	$103,323,000	$18,456,000	$69,859,000	
New Funding Available for Obligation	$5,902,609,000	$445,317,000	$105,597,000	$6,453,523,000

Table 2. Aircraft Procurement, Army Budget Year 2015 Obligations and Obligation Rates

Budget Year 2015	FY 2015	FY 2016	FY 2017
Total Obligations	$3,950,184	$1,875,308	$536,183
Overall Total Available for Obligation	$6,453,523,000	$6,453,523,000	$6,453,523,000
Obligation Rate	61.21%	29.06%	6.64%
Cumulative Obligations	61.21%	90.27%	96.91%

Comparing Projected Obligation Rates and Actual Obligation Rates

The actual obligation rates calculated in the second phase of the study were then compared to the historically-derived benchmarks for procurement accounts to determine which accounts met the 80% obligation rate goal after one year of execution and 90% after two years. The accounts were then measured against the Comptroller projected obligation rates to assess the projections' accuracy on an account by account basis.

To compare the accuracy of projections for different procurement accounts, the research team calculated the difference between the actuals and projections for each of the three fiscal years that each budget year of funding was available for obligation. Those differences were then averaged for each fiscal year of availability for an account. In addition to assessing the average projection error for each year of availability by account, the research team also aggregated the data by military department. The differences between projections and actuals were averaged by fiscal year across all accounts associated with each department rather than calculating the department average from the overall account average. The median difference by military department was also calculated to compare against the average and is located in the appendix of the report.

Analysis

Year-Over-Year Changes in Procurement Account Projected Obligation Rates

Of the 16 procurement accounts containing the complete eight years' worth of projections from budget years 2012 through 2019, one account possessed identical projections for all eight years; 12 possessed identical projections for seven of the eight years; two possessed identical projections for six of the eight years; and one possessed identical projections for five of the eight years.

It is somewhat counterintuitive that the projected obligation rates at the account level stay fairly consistent over time because the status and mix of programs within each account can vary considerably from year to year. One might expect that the procurement obligation rate would be slower for programs that are transitioning from development to procurement, are ramping up procurement, or are having contract award and negotiation issues. The fact that the projected obligation rates stay consistent from year to year suggests that these projections are not based on the execution plans of the programs within the accounts and are instead based on historical rates or aspirational obligation plans.

Moreover, the consistency of the accounts' projected obligation rates from year-to-year does not translate into alignment with the benchmarks established for budget

execution. As shown in Table 3, a majority of the accounts surveyed in the study projected their obligation rate for the first year of availability would be under the 80% goal. Only 31% of the 139 budget years assessed in this study projected that the obligation rate for the first year of funding would meet or exceed 80%. The Navy was the only military department that had a majority of its first year projections achieve the goal established by the Comptroller's office.

The lack of alignment between the projected obligation rates and historically-derived benchmarks could come as a result of delays in defense appropriations. Between FY 2011 and FY 2018, appropriations for defense were delayed on average by 139 days (including days under continuing resolutions and government shutdowns). These delays in appropriations would translate into delays in obligations, leading to obligation rates under 80%. According to the IDA study, obligation rate goals were lowered for 2013 and 2014 to 62% and 66%, respectively, "in recognition of the increasing difficulties that acquisition programs have in meeting the historical execution benchmarks" (Conley et al., 2014, pp. 5–6). However, this paper did not assess the change in projected obligation rates from budget years prior to 2012 to determine whether lack of alignment with the benchmarks correlates with delays in defense appropriations because it was beyond the scope of this effort.

Table 3. Comptroller Projected Obligation Rates vs. Execution Benchmarks for First Year

Military Department	Account-Budget Years with First Year Projection ≥ 80%	Total Number of Account-Budget Years of Data	Percentage of Account-Budget Year Projections Meeting or Exceeding First Year Benchmarks
Army	11	40	27.5%
Navy	25	40	62.5%
Air Force	4	36	11.1%
Other[1]	3	23	13.0%
TOTAL	**43**	**139**	**30.9%**

As shown in Table 4, a majority of the overall account budget year projections aligned with the two-year benchmark of 90% of funds obligated. However, fewer than half of

[1] The "Other" category throughout the tables in this report include the following accounts: Joint Improvised Explosive Device Defeat Fund; Procurement, Defense-Wide; and National Guard and Reserve Equipment.

the Army's two-year projections anticipated meeting the 90% goal while four-fifths of Navy and Air Force account budget year projections met or exceeded the benchmark.

Table 4. Comptroller Projected Obligation Rates vs. Execution Benchmarks for Second Year

Military Department	Account-Budget Years with Second Year Projection ≥ 90%	Total Number of Account-Budget Years of Data	Percentage of Account-Budget Year Projections Meeting or Exceeding Second Year Benchmarks
Army	19	40	47.5%
Navy	32	40	80.0%
Air Force	29	36	80.6%
Other	18	23	78.3%
TOTAL	**98**	**139**	**70.5%**

Comparing Actual Obligation Rates to Execution Benchmarks

While the previous analysis compares the projected obligation rates to the Comptroller execution benchmarks, this section compares the actual obligation rates to the execution benchmarks. As discussed in the methodology section, actual obligation rates were only calculated for four budget years (2012 to 2015) due to the lack of complete data for subsequent years. When compared to the cumulative execution benchmark rates, the majority of the actual obligation rates failed to meet both the one- and two-year targets of 80% and 90%, respectively.

As shown in Table 5, only 13% of 68 account budget years assessed met or exceeded the targeted goal for the first year of obligations, a smaller proportion than the 29% for projected obligation rates. The Air Force and Navy had the highest number of account budget years that matched or surpassed the 80% goal with four each. None of the Army's accounts met the benchmark, while approximately 28% were projected to do so, according to the previous section.

Table 5. Actual Obligation Rates vs. Execution Benchmarks for First Year

Military Department	Account-Budget Years with First Year Actuals ≥ 80%	Total Number of Account-Budget Years of Data	Percentage of Account-Budget Year Actuals Meeting or Exceeding First Year Benchmarks
Army	0	20	0.0%
Navy	4	20	20.0%
Air Force	4	16	25.0%
Other	1	12	8.3%
TOTAL	**9**	**68**	**13.2%**

The actual obligation rates performed better against the two-year execution benchmark of 90%. Nearly half (46%) of the total 68 account budget years obligated 90% or more of their funds by the end of the second year of availability. Relative to the Army and Air Force, which only saw 15% and 38% of their respective account budget years meet the threshold, the Navy Department impressed with 70% of its 20 account budget years reaching a 90% obligation rate. If the Marine Corps is excluded, that figure improves to 88% of the Navy's budget years for procurement accounts as a service.

Table 6. Actual Obligation Rates vs. Execution Benchmarks for Second Year

Military Department	Account-Budget Years with Second Year Actuals ≥ 90%	Total Account-Budget Years of Data	Percentage of Account-Budget Year Actuals Meeting or Exceeding Second Year Benchmarks
Army	3	20	15.0%
Navy	14	20	70.0%
Air Force	6	16	37.5%
Other	8	12	66.7%
TOTAL	**31**	**68**	**45.6%**

All four account-budget years of the Air Force's "other procurement" account met both the 80% benchmark with an average obligation rate of 91.7% for the first year of availability and the 90% benchmark with an average obligation rate of 97.3% over the first two years of availability. Such high rates, which are exceptions to the rest of the Air Force's actual obligation rates, may be attributed to the large amount of classified "pass-through" funding in this account (Hlad, 2016).

Measuring the Accuracy of Projected Obligation Rates Against Actual Obligation Rates

While the actual obligation rates for the procurement account budget years surveyed underperformed against the historically-derived benchmarks, the question remains how accurate the Comptroller projected obligation rates are in comparison with the actual obligation rates. Table 7 shows the average difference between the projected and actual obligation rate over the three years of funding availability for each procurement account. On average, the difference between the projected and actual obligation rates was approximately 14% for the first year of availability, 9% for the second year, and 6% for the third. Assessed by department, the Navy had the smallest average difference between its estimates and actuals with 8% for the first year, 7% for the second, and 5% for the third. If the Marine Corps is excluded from the Navy's average, the difference drops to 7%, 6%, and 3%, respectively, for the three years of availability. It is worth noting that across the different phases of this study, the Navy's projected and actual obligation rates were best aligned with the execution benchmarks, and its projections were the most accurate overall compared to the other military departments.

The Army had the largest average difference between its projections and actuals at 16% for the first year, 10% for the second, and 7% for the third. The error was driven by a 25% average difference between the projected obligation rate and actuals for the first year of availability in the Army's missile procurement account—the largest difference of any procurement account belonging to the three military departments. The Army anticipated obligating an average of approximately 83% of its account funding in the first year of availability for budget years 2012–2015, yet only obligated 58% of funding on average.

Another comparison between the three military departments' actual obligation rates can be made by assessing the aircraft procurement accounts of each. While the three accounts are not like-for-like comparisons given they procure different platforms and possess different funding levels (e.g., for the 2015 budget year, total obligations for Army aircraft procurement were $6,361,675,000 in current dollars; $16,308,912,000 for the Navy; and $12,187,879,000 for the Air Force), they nevertheless provide some standardization in comparison. As shown in the data in Table 7, the Navy and Army had similar average differences between their projections and actuals over the three years of availability. However, the average differences for the Air Force's aircraft procurement account were more than double those of the Navy and Army for the first two years of availability.

A comparison of the average and median difference between projected and actual obligation rate for the military departments can be found in the appendix.

Table 7. Average Difference Between Projected and Actual Obligation Rate by Account, Budget Years 2012–2015[2]

Account	First Year	Second Year	Third Year
Aircraft Procurement, Army	6.76%	4.80%	3.04%
Missile Procurement, Army	24.55%	14.47%	9.78%
W&TCV Procurement, Army	19.18%	11.73%	7.41%
Ammo Procurement, Army	12.26%	4.31%	9.51%
Other Procurement, Army	15.18%	14.20%	3.78%
Total Army Procurement	***15.58%***	***9.90%***	***6.70%***
Aircraft Procurement, Navy	6.92%	4.69%	2.36%
Weapons Procurement, Navy	5.42%	5.61%	4.22%
Ammo Procurement, Navy	3.64%	4.30%	2.05%
Other Procurement, Navy	11.41%	11.10%	2.51%
Procurement, Marine Corps	12.41%	10.11%	14.50%
Total Navy Procurement	***7.96%***	***7.16%***	***5.13%***
Aircraft Procurement, Air Force	19.83%	14.77%	5.17%
Missile Procurement, Air Force	12.50%	11.07%	1.51%
Ammo Procurement, Air Force	12.26%	4.31%	9.51%
Other Procurement, Air Force	12.06%	10.27%	2.10%
Total Air Force Procurement	***14.16%***	***10.11%***	***4.57%***
JIEDDF	18.00%	15.56%	2.95%
Procurement, Defense-Wide	4.31%	3.81%	2.74%
National Guard & Reserve Equip.	37.31%	15.00%	21.55%
Total Other Procurement	***19.87%***	***11.46%***	***9.08%***
TOTAL	**13.76%**	**9.42%**	**6.16%**

[2] Averages for the overall military departments represent average of all budget years' rates associated with a particular department's procurement accounts, not an average of the account averages.

Conclusion

This paper presents a preliminary set of analysis for procurement accounts only. The final report of this project will analyze other titles of the budget, particularly RDT&E and MILCON, to determine if similar trends are evident. The full analysis will also include additional years of budget data to examine longitudinal trends in obligation rates. While this analysis examined only a subset of the budget execution data, namely procurement accounts from FY 2012 to FY 2019, it yields a number of interesting findings:

- The projected obligation rates vary little from year to year within a particular procurement account. This suggests that the services do not regularly re-evaluate the projections for accuracy, nor do they attempt to adjust projections based on the plans of programs within the account.
- Just over half (51%) of the projected obligation rates for the first and second year of funding availability meet or exceed the corresponding execution benchmarks.
- While the projected obligations rates tend to be lower than the benchmarks, the actual obligation rates tend to be even lower than the projected rates.
- The difference between projected and actual obligation rates vary considerably across accounts, with some of the largest discrepancies in Missile Procurement, Army; Wheeled and Tracked Combat Vehicles, Army; and Aircraft Procurement, Air Force.
- The difference between the actual and projected obligation rates tend to narrow in the second and third year of funding availability. This suggests that while programs may be slower than expected executing funding in the first year it is available, they tend to catch up in subsequent years.
- The actual obligation rates fall well below the execution benchmarks, with just 13.2% of accounts meeting the benchmark standard in the first year and 45.6% in the second year.
- Overall, the Navy does the best at meeting its own projected obligation rates and the Comptroller benchmarks.

A central observation from this analysis is that the Comptroller benchmarks may not be a useful way to measure program execution. This is because the services do not appear to be planning or expecting to meet the benchmarks from the outset of the appropriations process, and it is not clear who, if anyone, is using the projected obligation rates. The benchmarks, however, are used by the Comptroller and congressional staff to gauge the execution of programs. However, the data suggests that if the intention of the benchmarks is to have a common standard based on historical execution patterns by which to hold programs accountable, then the benchmarks may need to be updated to account for changing patterns in the congressional budgeting process. For example, over the past 10 years the frequency and length of continuing resolutions has increased markedly, which may be having a systemic impact on the ability of programs to obligate funding in the first year of availability (Harrison & Daniels, 2017, pp. 4–5). Moreover, a common set of execution benchmarks may not be realistic because of the wide variation observed in the actual obligation rates across procurement accounts.

References

Conley, K. M., Dominy, J. R., Kneece, Jr., R. R. K., Mandelbaum, J., & Whitehead, S. K. (2014). *Implications of DOD funds execution policy for acquisition program management* (Report No. P-5164). Retrieved from https://www.ida.org/~/media/Corporate/Files/Publications/IDA_Documents/SFRD/2014/P-5164.ashx

Defense Security Cooperation Agency. (2012). *Security assistance management manual* (Chapter 12).

Washington, DC. Retrieved from http://www.samm.dsca.mil/chapter/chapter-12

Harrison, T. & Daniels, S. P. (2017). *Analysis of the FY 2018 Defense Budget*. Retrieved from https://csis-prod.s3.amazonaws.com/s3fs-public/publication/171208_Defense_Budget_Analysis.pdf?_bMzg.Rwos033iujMRE7YyyabEIygTDY

Hlad, J. (2016, June). The Air Force's budget black hole. *Air Force Magazine*. Retrieved from http://www.airforcemag.com/MagazineArchive/Pages/2016/June%202016/The-Air-Force's-Budget-Black-Hole.aspx

Office of the Under Secretary of Defense (Comptroller). (2016). *Financial summary tables: Department of Defense Budget for Fiscal Year 2017*. Washington, DC. Retrieved from http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/FY2017_Financial_Summary_Tables.pdf

Office of the Under Secretary of Defense (Comptroller). (2017). *OUSDC rule-of-thumb acquisition obligation and expenditure rates*. Washington, DC. Retrieved from https://www.dau.mil/tools/Lists/DAUTools/Attachments/292/OSD%20(C)%20Color%20Rule-of-Thumb%20Acq%20Obligation%20and%20Expenditure%20Rates.pdf

Schwartz, M. (2017). *End-year DoD contract spending* (CRS Report No. IF10365). Retrieved from Congressional Research Service website: https://fas.org/sgp/crs/natsec/IF10365.pdf

Schwartz, M., Sargent, J. F., Jr., & Mann, C. T. (2018). *Defense acquisitions: How and where DOD spends its contracting dollars* (CRS Report No. R44010). Retrieved from Congressional Research Service website: https://fas.org/sgp/crs/natsec/R44010.pdf

Tremaine, R. L., & Kinnear-Seligman, D. J. (2013). The challenges in meeting OSD's obligation and expenditure rate goals: A closer look at potential causal factors, their groupings, and how they modulate. *Defense Acquisition Research Journal, 20*(3), 373–400.

Unobligated balances: Freeing up funds, setting priorities and untying agency hands: Hearing before the Committee on Homeland Security and Governmental Affairs, 109th Cong. 3 (2006) (testimony of John P. Roth, Deputy Comptroller, Office of the Under Secretary of Defense).

Disclaimer

The Center for Strategic and International Studies (CSIS) does not take specific policy positions; accordingly, all views expressed in this presentation should be understood to be solely those of the author(s).

Appendix. Average and Median Difference Between Projected and Actual Obligation Rate by Military Department, Budget Years 2012–2015

Military Department	First Year	Second Year	Third Year
Army - Avg.	15.58%	9.90%	6.70%
Army - Med.	15.36%	8.60%	6.33%
Navy - Avg.	7.96%	7.16%	5.13%
Navy - Med.	5.97%	7.34%	3.37%
Air Force - Avg.	14.16%	10.11%	4.57%
Air Force - Med.	13.19%	9.54%	1.90%
Other - Avg.	19.87%	11.46%	9.08%
Other - Med.	12.54%	8.23%	3.22%
Total - Avg.	13.76%	9.42%	6.16%
Total - Med.	12.84%	8.97%	3.78%

ACQUISITION RESEARCH PROGRAM
GRADUATE SCHOOL OF BUSINESS & PUBLIC POLICY
NAVAL POSTGRADUATE SCHOOL
555 DYER ROAD, INGERSOLL HALL
MONTEREY, CA 93943

www.acquisitionresearch.net